

-30-

WHAT IS CLAIMED IS:

1. A method of estimating usage of a component within an application environment, wherein the method comprises:
conditioning data regarding workload and utilization of a component; and
determining an estimated usage of the component for a transaction type, wherein determining the estimated usage is performed during or after conditioning the data.
2. The method of claim 1, further comprising:
separating the data into sub-sets;

determining an averaged estimated usage from the estimated usages for the sub-sets; and
performing a significance test using the estimated usages for the sub-sets,
wherein determining an estimated usage comprises
determining an estimated usage for each of the sub-sets.
3. The method of claim 1, wherein conditioning includes one or more of:
smoothing the data;
filtering the data; and
determining an accuracy for the estimated usage.
4. The method of claim 1, wherein the data is asynchronous.

-31-

5. The method of claim 1, wherein determining the estimated usage is performed using regression.
6. The method of claim 1, wherein:
 - the method further comprises collecting the data asynchronously;
 - conditioning comprises:
 - smoothing the data before determining the estimated usage; and
 - filtering the data before determining the estimated usage;
 - determining the estimated usage is performed using regression; and
 - the method further comprises determining an accuracy for the estimated usage.
7. The method of claim 6, further comprising:
 - separating the data into sub-sets;
 - determining an averaged estimated usage from the estimated usages for the sub-sets; and
 - performing a significance test using the estimated usages for the sub-sets,wherein determining an estimated usage comprises
 - determining an estimated usage for each of the sub-sets;.
8. An apparatus operable for carrying out the method of claim 1.

-32-

9. A method of estimating usage of a component within an application environment, wherein the method comprises:
accessing data regarding workload and utilization of the component; and
determining an estimated usage of the component for a transaction type, wherein determining is performed using a mechanism that is designed to work with a collinear relationship.
10. The method of claim 9, further comprising conditioning the data before determining the estimated usage.
11. The method of claim 10, wherein conditioning includes one or more of:
smoothing the data;
filtering the data; and
determining an accuracy for the estimated usage.
12. The method of claim 9, further comprising:
separating the data into sub-sets;
determining an averaged estimated usage from the estimated usages for the sub-sets; and
performing a significance test using the estimated usages for the sub-sets,
wherein determining an estimated usage comprises
determining an estimated usage for each of the sub-sets;.
13. The method of claim 9, wherein the data is asynchronous.

-33-

14. The method of claim 9, wherein determining the estimated usage is performed using a ridge regression.
15. An apparatus operable for carrying out the method of claim 9.

-34-

16. A method of estimating usage of a component within an application environment, wherein the method comprises:
separating data regarding workload and utilization of the component into sub-sets;
for each of the sub-sets, determining an estimated usage of the component for a transaction type; and
performing a significance test using the estimated usages for the sub-sets.
17. The method of claim 16, wherein the data is asynchronous.
18. The method of claim 16, wherein determining estimated usages are performed using regression.
19. An apparatus operable for carrying out the method of claim 16.

-35-

20. A data processing system readable medium having code for estimating usage of a component within an application environment, wherein the code is embodied within the data processing system readable medium, the code comprising:
- an instruction for conditioning data regarding workload and utilization of a component; and
 - an instruction for determining an estimated usage of the component for a transaction type, wherein the instruction for determining the estimated usage is executed during or after the instruction for conditioning the data.
21. The data processing system readable medium of claim 20, wherein the code further comprises:
- an instruction for separating the data into sub-sets;
 - an instruction for determining an averaged estimated usage from the estimated usages for the sub-sets; and
 - an instruction for performing a significance test using the estimated usages for the sub-sets,
- wherein the instruction for determining an estimated usage comprises an instruction for determining an estimated usage for each of the sub-sets.
22. The data processing system readable medium of claim 20, wherein the instruction for conditioning includes one or more of:
- an instruction for smoothing the data;
 - an instruction for filtering the data; and

-36-

an instruction for determining an accuracy for the
estimated usage.

23. The data processing system readable medium of claim 20,
wherein the data is asynchronous.

24. The data processing system readable medium of claim 20,
wherein the instruction for determining the estimated usage
comprises an instruction for determining the estimated usage
using regression.

25. The data processing system readable medium of claim 20,
wherein:

the code further comprises an instruction for collecting
the data asynchronously;
the instruction for conditioning comprises:
an instruction for smoothing the data before determining
the estimated usage; and
an instruction for filtering the data before executing
the instruction for determining the estimated usage;
the instruction for determining the estimated usage is
executed using regression; and
the code further comprises an instruction for determining
an accuracy for the estimated usage.

-37-

26. The data processing system readable medium of claim 25, wherein the code further comprises:
- an instruction for separating the data into sub-sets;
 - an instruction for determining an averaged estimated usage from the estimated usages for the sub-sets; and
 - an instruction for performing a significance test using the estimated usages for the sub-sets,
- wherein the instruction for determining an estimated usage comprises an instruction for determining an estimated usage for each of the sub-sets.

-38-

27. A data processing system readable medium having code for estimating usage of a component within an application environment, wherein the code is embodied within the data processing system readable medium, the code comprising:
- an instruction for accessing data regarding workload and utilization of the component; and
 - an instruction for determining an estimated usage of the component for a transaction type, wherein the instruction for determining is executing using a mechanism that is designed to work with a collinear relationship.
28. The data processing system readable medium of claim 27, wherein the code further comprises an instruction for conditioning the data before executing the instruction for determining the estimated usage.
29. The data processing system readable medium of claim 28, wherein the instruction for conditioning includes one or more of:
- an instruction for smoothing the data;
 - an instruction for filtering the data; and
 - an instruction for determining an accuracy for the estimated usage.

-39-

30. The data processing system readable medium of claim 27,
wherein the code further comprises:
 an instruction for separating the data into sub-sets;
 an instruction for determining an averaged estimated usage
 from the estimated usages for the sub-sets; and
 an instruction for performing a significance test using the
 estimated usages for the sub-sets,
wherein the instruction for determining an estimated usage
 comprises an instruction for determining an estimated
 usage for each of the sub-sets.
31. The data processing system readable medium of claim 27,
wherein the data is asynchronous.
32. The data processing system readable medium of claim 27,
wherein the instruction for determining the estimated usage
comprises an instruction for determining the estimated usage
using ridge regression.

-40-

33. A data processing system readable medium having code for estimating usage of a component within an application environment, wherein the code is embodied within the data processing system readable medium, the code comprising:
- an instruction for separating data regarding workload and utilization of the component into sub-sets;
 - for each of the sub-sets, an instruction for determining an estimated usage of the component for a transaction type; and
 - an instruction for performing a significance test using the estimated usages for the sub-sets.
34. The data processing system readable medium of claim 33, wherein the data is asynchronous.
35. The data processing system readable medium of claim 33, wherein the instruction for determining estimated usages comprises an instruction for determining estimated usages using regression.